# National Center for Science and Engineering Statistics | NSF 18-313

TABLE A-2

Companies in the target population and selected for the sample, by industry and company size: 2015
(Number of companies)

Industry and company size	NAICS code	Companies in target population <sup>a</sup>	Companies selected for the sample		
			All companies	Noncertainties	Certainties
All industries	21-23, 31-33, 42-81	2,029,436	44,824	25,009	19,815
Manufacturing industries	31-33	145,585	18,979	9,824	9,155
Food	311	12,777	1,019	619	400
Beverages and tobacco products	312	2,932	368	255	113
Textiles, apparel, and leather products	313-16	6,899	721	453	268
Wood products	321	6,971	668	451	217
Paper	322	1,954	367	180	187
Printing and related support activities	323	11,469	848	565	283
Petroleum and coal products <sup>b</sup>	324	519	182	54	128
Chemicals	325	6,492	2,114	788	1,326
Basic chemicals	3251	911	319	117	202
Resins, synthetic rubber, and artificial synthetic fibers and filaments	3252	698	258	111	147
Pesticides, fertilizers, and other agricultural chemicals	3253	391	136	59	77
Pharmaceuticals and medicines	3254	1,586	598	65	533
Soaps, cleaning compounds, and toilet preparations	3256	1,132	311	175	136
Paints, coatings, adhesives, and other chemicals	3255, 3259	1,774	492	261	231
Plastics and rubber products	326	6,643	1,054	538	516
Nonmetallic mineral products	327	5,682	512	269	243
Primary metals	331	2,424	447	183	264
Fabricated metal products	332	30,926	2,107	1,246	861
Machinery	333	13,826	2,132	1,035	1,097
Agricultural implements	33311	773	209	89	120
Semiconductor machinery	333242	75	73	0	73
Engines, turbines, and power transmission equipment	3336	586	154	59	95
Other machinery	other 333	12,392	1,696	887	809
Computer and electronic products	334	7,278	2,004	789	1,215
Communications equipment	3342	864	258	62	196
Semiconductors and other electronic components	3344	2,533	545	231	314
Navigational, measuring, electromedical, and control instruments	3345	2,765	905	363	542
Electromedical, electrotherapeutic, and irradiation apparatuses	334510, 334517	441	202	59	143
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	328	123	25	98
Other measuring and controlling devices	other 3345	1,996	580	279	301
Other computer and electronic products	other 334	1,116	296	133	163
Electrical equipment, appliances, and components	335	3,170	778	400	378
Transportation equipment	336	6,297	1,215	542	673
Motor vehicles, bodies, trailers, and parts	3361-63	3,974	639	299	340
Aerospace products and parts	3364	974	274	94	180
Aircraft, aircraft engines, and aircraft parts	336411-13	920	232	94	138
Guided missiles, space vehicles, and related parts	336414, 336415, 336419	54	42	0	42
Military armored vehicles, tanks, and tank components	336992	39	28	0	28

# National Center for Science and Engineering Statistics | NSF 18-313

TABLE A-2

Companies in the target population and selected for the sample, by industry and company size: 2015
(Number of companies)

Industry and company size	NAICS code	Companies in target population <sup>a</sup>	Companies selected for the sample		
			All companies	Noncertainties	Certainties
Other transportation equipment	other 336	1,310	274	149	125
Furniture and related products	337	7,326	770	495	275
Miscellaneous manufacturing	339	11,213	1,478	836	642
Medical equipment and supplies	3391	4,263	713	402	311
Other miscellaneous	3399	6,950	765	434	331
Unclassified	_	787	195	126	69
Nonmanufacturing industries	21-23, 42-81	1,883,851	25,845	15,185	10,660
Mining, extraction, and support activities <sup>b</sup>	21	9,994	782	417	365
Utilities	22	1,313	179	21	158
Wholesale trade	42	132,595	2,982	2,018	964
Electronic shopping and electronic auctions	454111-12	6,803	449	326	123
Transportation and warehousing	48-49	57,408	636	289	347
Information	51	27,252	2,734	1,306	1,428
Publishing	511	8,923	1,006	421	585
Newspaper, periodical, book, and directory publishers	5111	5,391	346	193	153
Software publishers	5112	3,532	660	228	432
Telecommunications	517	3,557	418	268	150
Data processing, hosting, and related services	518	4,449	807	332	475
Other information	other 51	10,323	503	285	218
Finance and insurance	52	67,549	1,046	494	552
Real estate and rental and leasing	53	59,324	616	279	337
Lessors of nonfinancial intangible assets (except copyrighted works)	533	857	99	4	95
Other real estate and rental and leasing	other 53	58,467	517	275	242
Professional, scientific, and technical services	54	225,946	8,906	3,930	4,976
Architectural, engineering, and related services	5413	33,437	1,469	740	729
Computer systems design and related services	5415	31,628	2,111	1,263	848
Scientific research and development services	5417	4,818	2,923	568	2,355
Biotechnology research and development	541711	1,252	808	169	639
Physical, engineering, and life sciences (except biotechnology) research and development	541712	3,255	1,879	377	1,502
Social sciences and humanities research and development	541720	311	236	22	214
Other professional, scientific, and technical services	other 54	156,063	2,403	1,359	1,044
Health care services	621-23	245,315	1,722	1,158	564
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55– 56, 624, 71–72, 81	1,049,531	5,645	4,902	743
Unclassified	_	821	148	45	103
Company size (number of domestic employees)	_				
All companies	_	2,029,436	44,824	25,009	19,815
< 5 <sup>c</sup>	_	132,851	2,274	1,418	856
5-9	_	854,317	7,026	6,207	819
10-19	_	524,474	6,167	5,199	
20-49	_	333,073	7,931	5,858	
50-99	_	100,740	5,770	3,067	2,703
100-249	_	53,988	6,611	2,101	4,510
250-499	_	15,398	3,323	575	

### National Center for Science and Engineering Statistics | NSF 18-313

TABLE A-2

Companies in the target population and selected for the sample, by industry and company size: 2015

(Number of companies)

			Companies selected for the sample		
		Companies in target	All		
Industry and company size	NAICS code	population <sup>a</sup>	companies	Noncertainties	Certainties
500-999	_	7,214	2,182	260	1,922
1,000-4,999	_	5,765	2,447	221	2,226
5,000-9,999	_	781	481	33	448
10,000-24,999	_	508	355	39	316
25,000 or more	_	327	257	31	226

NAICS = 2012 North American Industry Classification System.

#### Note(s)

Certainties are companies whose probability of selection is one based on prior-year R&D expenditures equal to or greater than \$3 million as well as others included in the sample for analytical purposes (analytical certainties). Noncertainties are companies whose probability of selection is less than 1. Companies that were missing or had an incomplete NAICS code at the time of sampling were assigned to an "unclassified" industry category temporarily. If an unclassified company reported R&D expenditures, its primary industrial activity was investigated, and a NAICS code was assigned during statistical processing. The total sample size reflects the time between sample selection and survey mailout; that is, the sample was updated before actual mailout took place.

### Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2015.

<sup>&</sup>lt;sup>a</sup> Estimates of the number of companies in the target population are based on the original sampling frame that was created to select the 2015 Business R&D and Innovation Survey (BRDIS) sample. These estimates do not include 52 R&D performers from the previous year's sample, which were not on the original sampling frame but were found during the survey's annual contact update procedures. These companies were added to the 2015 sample with certainty but are not reflected in the number of certainties selected for the sample.

<sup>&</sup>lt;sup>b</sup> Because of the widespread practice of the larger petroleum extraction and refining companies vertically integrating their activities, petroleum refineries (NAICS 32411) and oil and gas extraction (NAICS 211) were combined during sampling.

<sup>&</sup>lt;sup>c</sup> This category includes companies that are represented on the sampling frame as having missing data or fewer than 5 paid employees, but these companies are in scope to BRDIS because they have at least \$250,000 in annual payroll.